



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: D-30KU
 UNIQUE ID NUMBER: 1AA003
 COMBUSTOR:
 ENGINE TYPE: MTF

BYPASS RATIO: 2.4
 PRESSURE RATIO (π_{00}): 17.4
 RATED THRUST (F_{00}) (kN): 112.7

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	37.4	191.7	43.8	29.5
AS % OF ORIGINAL LIMIT	191.0	162.5	58.6	128.7
AS % OF CAEP/2 LIMIT (NO _x)			73.2	
AS % OF CAEP/4 LIMIT (NO _x)			93.5	
AS % OF CAEP/6 LIMIT (NO _x)			106.3	
AS % OF CAEP/8 LIMIT (NO _x)			135.3	

DATA STATUS

- PRE-REGULATION
 - CERTIFICATION
 x REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 x OTHER (SEE REMARKS)

EMISSIONS STATUS

- DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	1.520	0.30	2.80	16.30	
CLIMB OUT	85	2.2	1.300	0.40	3.70	12.60	
APPROACH	30	4.0	0.500	1.20	11.80	5.10	
IDLE	7	26.0	0.215	10.50	54.00	2.70	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			691	3753	20341	4720	-
NUMBER OF ENGINES				5	5	5	1
NUMBER OF TESTS				5	5	5	1
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				33.3	180.5	41.9	22.9
SIGMA (D _p /F ₀₀ in g/kN, or SN)				6.6	33.4	3.2	
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	102.6-102.7
TEMPERATURE (K)	292-294
ABS HUMIDITY (kg/kg)	0.00788

FUEL

SPEC	TS-1
H/C	2
AROM (%)	18.6

MANUFACTURER: Aviadvigatel
 TEST ORGANIZATION: State Inst for Civ Aviation
 TEST LOCATION: Sheremetjevo, Moscow
 TEST DATES: 19/07/1989

REMARKS

1. Data obtained on aircraft (Il-62M)
2. In-service engine(s), tested after overhaul

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)